

HEALTH

Nashville and Davidson County, TN 2002

Metropolitan Public Health Department of Nashville and
Davidson County, TN

311 23rd Avenue North

Nashville, TN 37203

<http://healthweb.nashville.org>

Davidson County Community Health Assessment Series

- No. 1 Davidson County Mortality Report 1995**
- No. 2 Davidson County Natality Report 1996**
- No. 3 The Health Status of Davidson County 1990 - 1996**
- No. 4 The Health Status of Davidson County's Fourteen Planning Districts 1990 - 1996**
- No. 5 Health Pulse Companion 1998**
- No. 6 Notifiable Diseases 1990 - 1997 Davidson County, Tennessee**
- No. 7 1997 Mortality Assessment, Davidson County, TN**
- No. 8 Sexually Transmitted Diseases in the 1990's in Davidson County, Tennessee**
- No. 9 Davidson County, Tennessee Fetal and Infant Mortality Report, 1989-1998**
- No. 10. Health, Nashville and Davidson County, TN, 2002**

Health, Nashville and Davidson County, TN, 2002

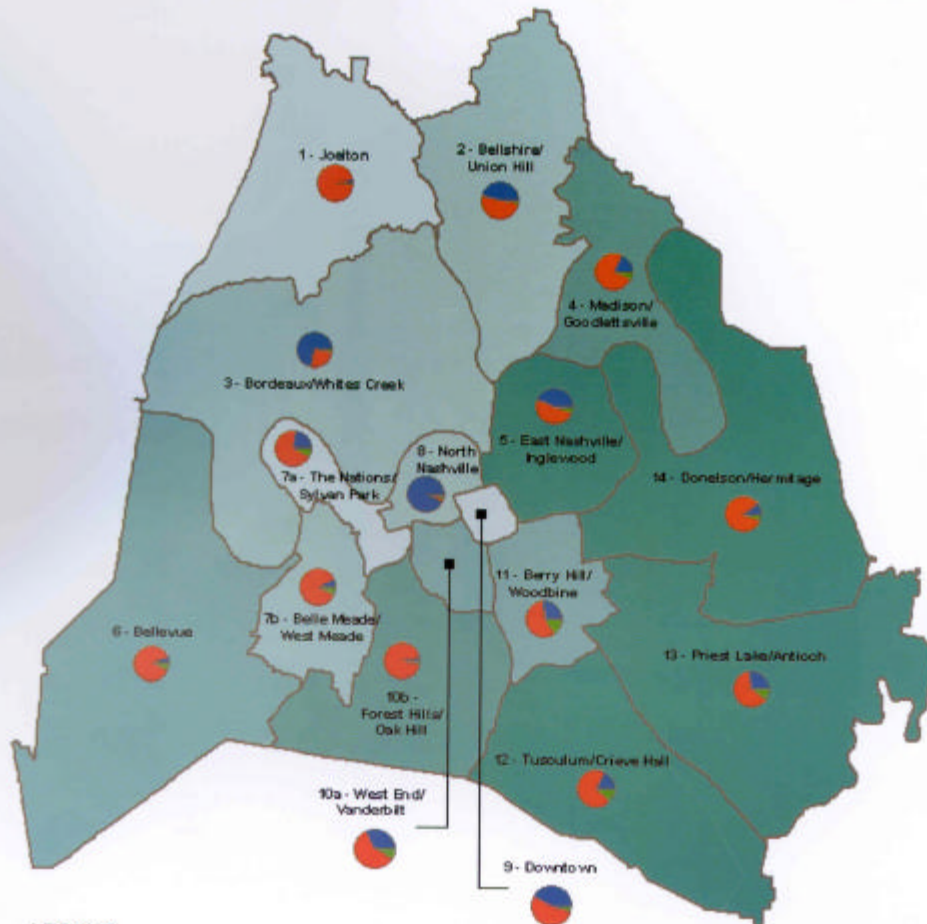
**Division of Epidemiology
Bureau of Community Assessment and Health Promotion
Metropolitan Public Health Department of Nashville and Davidson County
311 23rd Avenue North, Nashville, TN 37203
Web Site: <http://healthweb.nashville.org>**

Census Tracts in Davidson County, TN, 2000

TRACT	LAND AREA	TOTAL AREA	TOTAL POP	BLACK	WHITE	OTHER
191.01	43.9	43.9	6697	188	5322	87
191.02	19.3	19.3	6080	434	1612	127
192	35.9	35.9	7325	862	5226	144
193.01	3.3	3.3	3387	225	2811	81
193.02	3.4	3.4	5968	955	4852	261
194.01	3.7	3.7	3432	697	2625	320
194.02	1.2	1.2	5240	1003	3808	429
195.01	6.0	7.4	5236	193	4897	116
195.02	2.7	3.1	4285	419	3735	118
196	7.6	6.1	7396	1486	5688	418
197.01	1.3	1.3	4222	597	3307	316
197.02	1.8	1.1	3327	756	2126	449
198.01	2.1	2.2	5228	1361	3654	265
198.02	2.8	2.8	3031	442	2550	97
199.01	2.1	2.1	2961	373	2524	115
199.02	2.6	2.6	4916	4004	791	148
199.04	0.8	0.8	2736	2379	301	57
199.05	2.9	2.9	6643	5276	2639	428
199.06	1.4	1.4	2371	732	1556	83
199.07	1.6	1.7	4219	321	3666	187
199.08	1.2	1.2	6168	524	5287	185
199.09	1.7	1.7	5514	2415	2641	458
199.10	1.0	1.0	5330	3005	1928	207
199.11	1.4	1.4	4185	896	3141	152
199.12	3.1	3.2	5157	1591	3320	246
199.13	0.3	0.3	6160	7553	2108	322
199.14	0.8	0.8	4112	3897	268	150
199.15	0.5	0.5	2368	2014	228	226
199.16	0.3	0.3	602	164	714	61
199.17	0.8	0.8	2885	401	2078	150
199.18	1.0	1.0	2348	566	1785	185
199.19	0.4	0.4	2387	548	1323	138
199.20	0.3	0.3	3887	2781	662	211
199.21	1.1	1.1	254	146	78	11
199.22	0.5	0.5	1788	1424	207	52
199.23	3.2	3.2	3367	4914	247	528
199.24	1.8	1.8	2932	1817	375	60
199.25	3.4	3.4	5783	4223	800	113
199.26	5.1	5.2	4307	3139	1268	322
199.27	5.7	6.1	2377	1232	1085	60
199.28	34.2	35.9	1777	163	1517	97
199.29	1.8	1.8	5243	520	4513	679
199.30	1.1	1.1	4377	489	3408	641
199.31	1.4	1.4	3387	86	3227	91
199.32	0.5	0.5	2126	1112	907	147
199.33	1.7	1.8	6885	8858	121	141
199.34	2.5	2.5	5223	4786	306	111
199.35	0.3	0.3	1685	1687	48	18
199.36	0.4	0.4	1153	1686	52	42
199.37	1.0	1.1	2367	1928	352	85
199.38	0.8	0.8	530	385	139	15
199.39	0.4	0.4	2231	2053	151	77
199.40	0.5	0.5	1947	1871	30	46
199.41	0.7	0.7	2571	1889	325	57
199.42	0.6	0.6	70	70	213	74
199.43	0.8	0.8	2306	928	1253	117
199.44	0.5	0.5	334	38	274	6
199.45	0.3	0.3	3221	3028	86	105
199.46	2.2	2.1	561	35	416	50
199.47	2.5	2.6	3150	421	3911	1008
199.48	2.8	2.9	4980	212	3889	209
199.49	1.3	1.3	2671	83	2507	101
199.50	6.8	7.4	4362	219	4209	134
199.51	4.3	4.1	5091	351	4484	234
199.52	3.2	3.4	4207	301	3752	154
199.53	1.3	1.5	2428	237	2963	125
199.54	1.3	1.3	3385	469	3242	173
199.55	2.8	2.8	3643	339	3118	165
199.56	2.1	2.1	4141	324	3747	194
199.57	4.4	4.4	2860	1544	5850	496
199.58	1.8	1.8	2748	244	2448	120
199.59	3.8	3.8	5243	368	4551	254
199.60	4.7	4.7	7272	1267	5827	388

TRACT	LAND AREA	TOTAL AREA	TOTAL POP	BLACK	WHITE	OTHER
199.61	5.5	5.5	5256	965	3826	445
199.62	3.2	3.2	5272	1798	3025	447
199.63	0.7	0.7	3136	863	1880	258
199.64	0.9	0.9	4508	1140	2863	725
199.65	3.9	3.9	6971	2727	3321	818
199.66	1.0	1.0	2638	543	2088	87
199.67	1.5	1.5	5771	1850	3613	313
199.68	2.4	11.3	3905	747	3613	146
199.69	1.4	1.4	5844	728	3935	911
199.70	26.4	27.5	7797	1981	5294	528
199.71	7.6	7.7	1808	156	1238	114
199.72	1.4	1.4	1191	1399	3713	230
199.73	1.8	1.8	3684	608	2643	1152
199.74	2.1	2.1	2579	387	2029	155
199.75	0.5	0.5	1235	894	321	43
199.76	1.2	1.2	2022	886	907	209
199.77	0.7	0.7	3487	2711	580	166
199.78	0.4	0.4	2416	1890	426	91
199.79	0.4	0.4	2982	99	2555	301
199.80	0.6	0.6	3361	351	4053	260
199.81	0.6	0.6	2240	205	1814	221
199.82	1.3	1.3	5370	81	4881	238
199.83	0.7	0.7	4281	93	3569	599
199.84	0.9	0.9	4537	867	3746	224
199.85	0.5	0.5	3077	1802	1344	91
199.86	0.7	0.7	2148	1530	522	84
199.87	1.9	1.9	1852	126	1370	111
199.88	0.9	0.9	3303	453	2026	824
199.89	0.8	0.8	2222	318	1471	433
199.90	1.3	1.3	3308	746	2763	842
199.91	1.1	1.1	3553	311	2817	338
199.92	1.4	1.4	5	1	1	1
199.93	3.3	3.3	6256	88	5996	65
199.94	1.6	1.6	5077	319	4804	149
199.95	1.8	1.8	4347	41	4301	105
199.96	1.5	1.5	4529	45	4385	103
199.97	1.7	1.7	5038	48	4855	137
199.98	1.3	1.3	4790	1036	3623	691
199.99	2.9	2.9	3881	10	3338	143
199.00	2.8	2.8	3007	23	2803	151
199.01	4.1	4.1	5252	641	4345	262
199.02	1.1	1.1	1528	9	1422	17
199.03	22.8	23.3	6562	419	5667	355
199.04	2.5	2.5	5882	284	5274	494
199.05	6.2	6.2	4331	313	3738	285
199.06	2.6	2.6	4398	125	4038	194
199.07	1.8	1.8	5213	236	5628	351
199.08	3.2	3.2	3974	132	3544	150
199.09	2.4	2.4	3508	133	2755	180
199.10	4.1	4.1	5307	98	5620	98
199.11	4.1	4.1	2386	24	2183	81
199.12	8.8	8.8	4183	29	4032	81
199.13	7.6	7.7	3278	26	3244	86
199.14	1.3	1.3	4613	70	4528	75
199.15	3.2	3.2	6001	333	5316	352
199.16	1.3	1.3	2735	301	2191	243
199.17	0.8	0.8	2923	183	2109	211
199.18	1.6	1.6	7543	1024	4588	1037
199.19	1.4	1.4	7364	7138	344	1022
199.20	0.8	0.8	4211	304	2201	305
199.21	1.1	1.1	3884	818	2363	575
199.22	0.8	0.8	4632	720	3399	552
199.23	0.7	0.7	3618	307	3034	311
199.24	4.3	4.3	4616	1303	3012	445
199.25	0.8	0.8	2251	1023	1124	414
199.26	0.9	0.9	4485	881	2904	582
199.27	1.0	1.0	3235	588	2423	340
199.28	0.9	0.9	3865	880	2543	442
199.29	2.5	2.5	2866	682	1447	307
199.30	3.7	3.7	4627	1107	2435	380
199.31	11.4	11.4	1984	122	1756	87
TOTAL	502.3	528.1	589,891	147,696	391,783	48,412

Public Health Planning Districts In Davidson County, TN, 2000

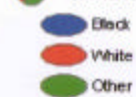


LEGEND

Total Population

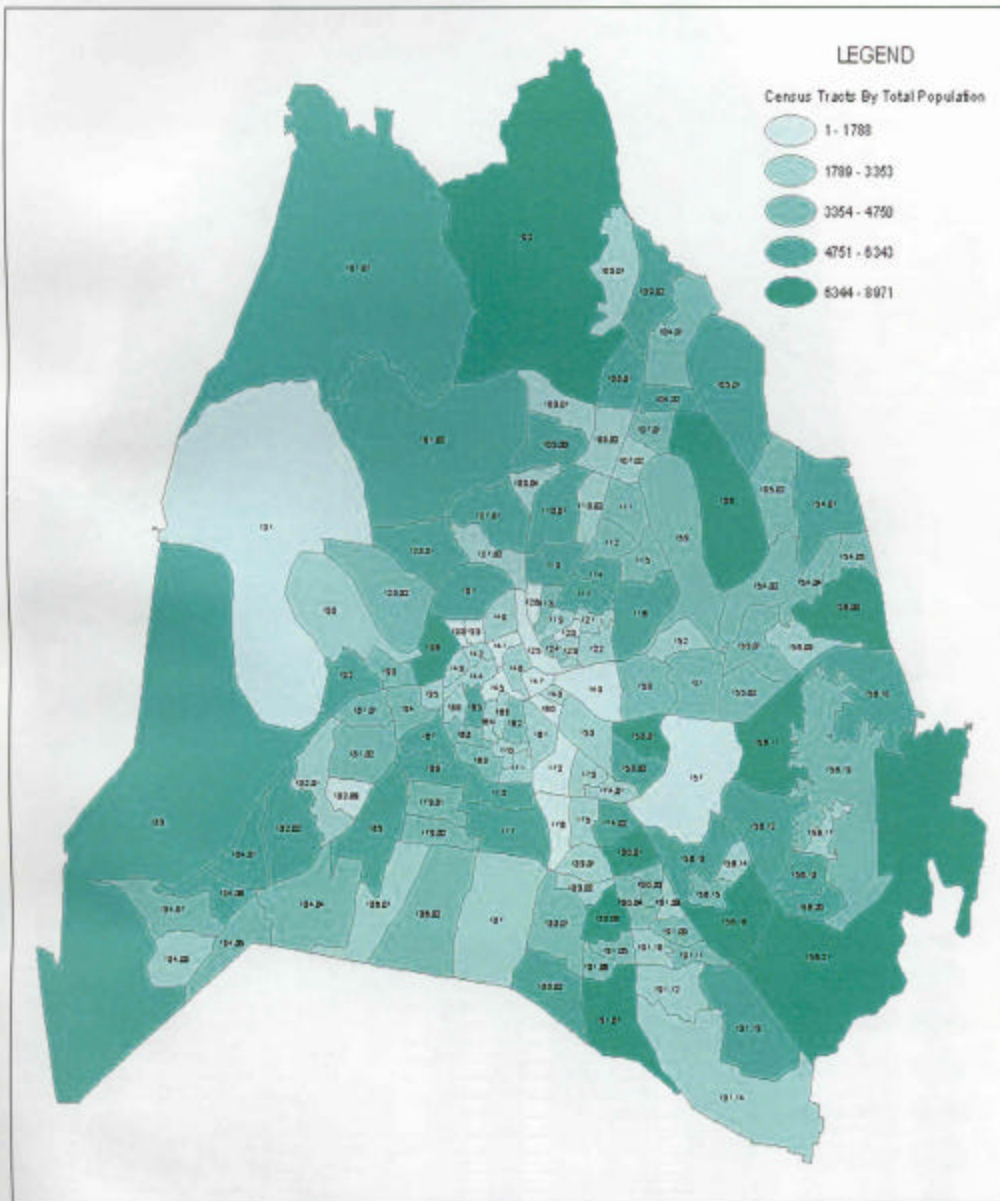


Race Ratio

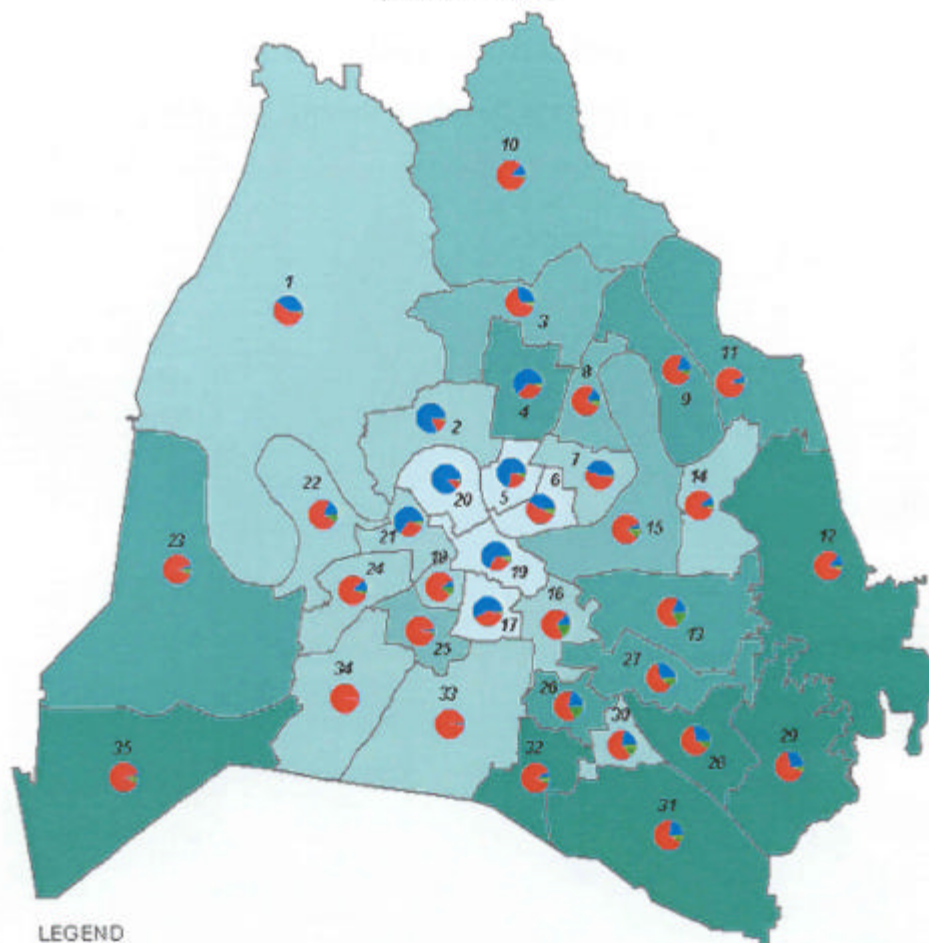


Public Health Planning District	Area (sq. mi.)	Population			
		Total	Black	White	Other
1 Joelton	39.6	5,026	199	4,779	78
2 Bellshire/Union Hill	42.0	17,820	9,206	9,061	483
3 Bordeaux/Whites Creek	71.4	25,229	18,282	6,344	603
4 Madison/Goodlettsville	28.7	41,229	7,304	31,277	2,648
5 East Nashville/Inglewood	20.6	64,940	28,961	32,368	3,611
6 Bellevue	70.4	34,006	1,735	30,204	2,067
7a The Nations/Sylvan Park	9.1	12,791	2,862	8,995	634
7b Belle Meade/West Meade	16.3	26,991	1,881	23,590	1,920
8 North Nashville	7.5	22,594	20,928	1,121	536
9 Downtown	2.8	3,401	1,429	1,803	169
9a West End/Vanderbilt	6.4	32,206	10,641	19,134	2,511
9b Forest Hills/Oak Hill	32.6	42,182	895	40,030	1,257
11 Berry Hill/Woodbine	15.4	33,725	8,651	20,077	5,047
12 Tusculum/Crieve Hall	42.7	77,441	13,477	55,149	8,816
13 Priest Lake/Antioch	59.4	57,579	15,036	36,844	5,699
14 Donelson/Hermitage	62.5	72,711	7,141	61,419	4,151
TOTAL	625.4	668,891	147,696	381,783	40,412

Census Tracts in Davidson County, TN, 2000

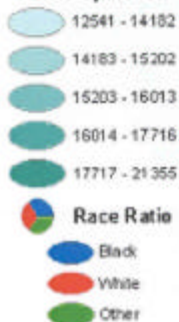


Metropolitan Council Districts In Davidson County, TN, 2000 (before 2003)



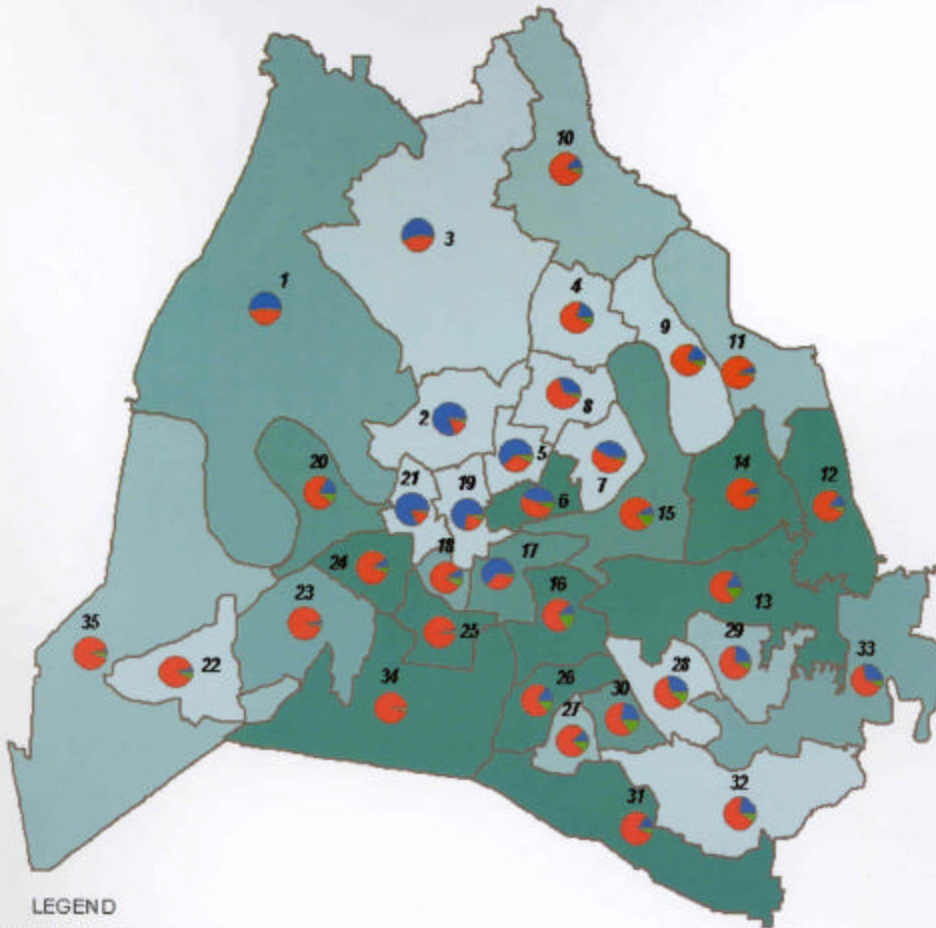
LEGEND

Total Population



Council District	Area (sq. mi.)	Population				Council District	Area (sq. mi.)	Population			
		Total	Black	White	Other			Total	Black	White	Other
1	98.3	15,114	5,804	8,949	261	19	4.9	12,659	8,891	4,240	729
2	9.6	15,039	12,277	2,367	514	20	5.5	12,666	11,252	1,273	241
3	14.5	15,419	4,272	10,404	734	21	4.3	15,122	8,282	4,281	960
4	8.0	16,788	18,493	5,635	702	22	18.1	14,892	2,554	10,834	1,464
5	3.4	13,838	18,072	1,814	740	23	43.9	12,716	952	15,644	1,120
6	7.6	14,182	5,748	7,512	922	24	8.8	15,869	1,555	12,652	662
7	5.2	14,911	6,718	7,578	615	25	4.6	15,862	785	14,756	321
8	5.1	15,537	2,598	11,894	947	26	4.4	16,817	3,523	10,152	2,800
9	11.1	17,178	3,140	12,866	1,253	27	9.1	12,873	4,222	10,428	1,823
10	42.1	16,813	2,015	13,500	293	28	9.7	21,537	5,518	13,788	2,231
11	15.0	16,862	1,163	15,217	582	29	17.7	21,886	6,550	14,288	1,048
12	35.9	21,440	2,604	17,459	1,177	30	3.5	14,810	3,740	9,627	2,043
13	14.5	12,494	2,194	11,210	3,252	31	24.5	21,136	4,742	15,038	1,356
14	9.0	14,272	1,590	12,588	592	32	7.4	19,212	1,388	16,238	1,535
15	16.7	15,263	1,009	12,785	1,527	33	10.8	15,172	1,748	14,632	792
16	5.6	14,439	1,656	10,268	2,515	34	14.4	15,263	1,465	14,718	257
17	3.8	12,541	7,212	4,828	501	35	28.0	21,264	894	19,544	1,117
18	2.0	148,481	951	12,228	1,575	70,744	525	589,887	142,690	288,753	40,412

Metropolitan Council Districts In Davidson County, TN, 2000 (new Council Districts effective 2003)

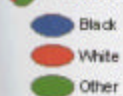


LEGEND

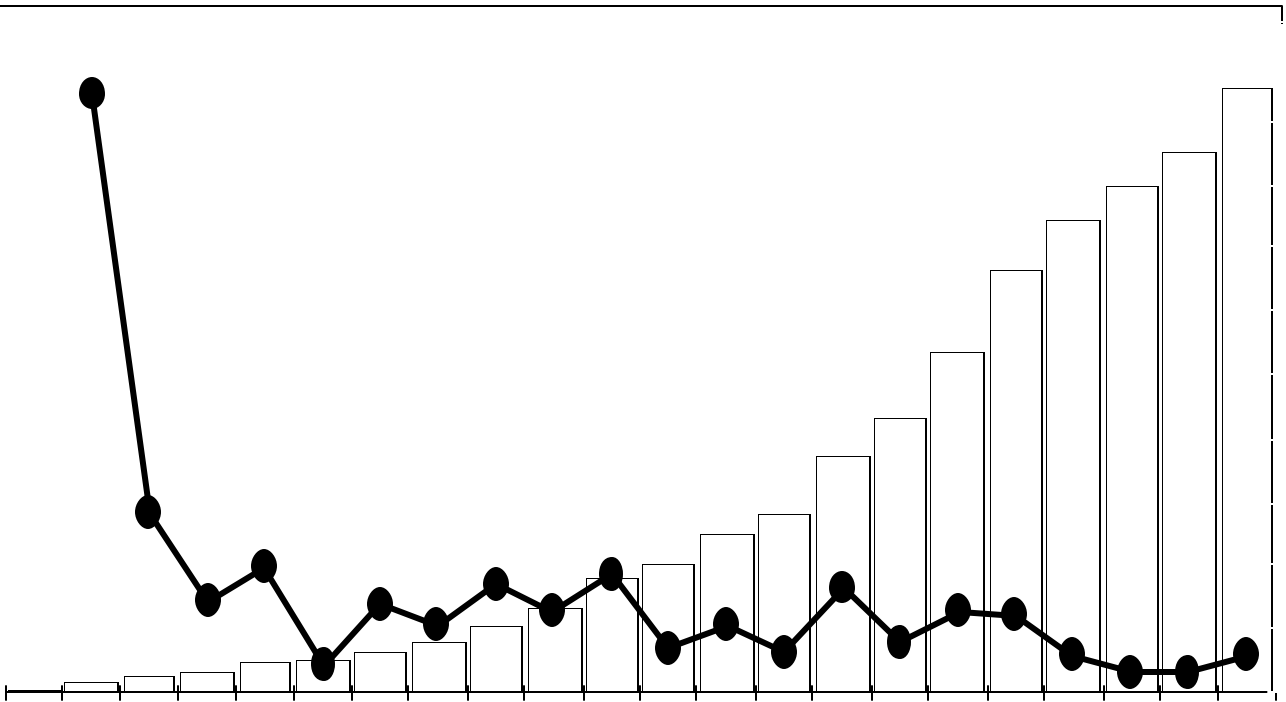
Total Population



Race Ratio



Council District	Area (sq. mi.)	Population				Council District	Area (sq. mi.)	Population			
		Total	Black	White	Other			Total	Black	White	Other
1	31.0	16,408	8,011	7,442	356	19	5.1	15,510	11,178	3,400	852
2	30.7	15,516	12,518	2,402	604	20	30.0	16,873	2,892	11,791	1,890
3	47.1	15,512	8,050	6,569	274	21	4.3	15,506	12,494	2,531	483
4	8.3	15,523	3,231	11,224	1,068	22	9.7	15,875	747	13,862	1,066
5	4.0	15,807	0,601	5,050	956	23	13.5	16,400	639	15,143	618
6	4.6	16,874	7,442	8,437	1,095	24	5.7	16,882	1,590	14,465	817
7	8.0	15,581	6,283	8,601	617	25	5.5	17,044	483	16,010	551
8	8.4	15,895	4,872	10,272	641	26	6.3	17,094	2,853	12,049	2,192
9	10.7	15,497	2,816	11,520	1,061	27	3.6	16,163	2,674	12,161	1,808
10	26.1	16,217	2,081	13,266	770	28	7.8	15,477	4,272	9,259	1,746
11	16.7	16,247	1,028	14,204	517	29	7.5	16,025	4,651	10,733	1,241
12	11.0	17,053	2,322	12,867	934	30	4.0	16,590	3,847	10,239	2,574
13	22.8	17,077	2,890	11,867	2,692	31	19.5	16,853	2,231	13,468	1,154
14	11.9	17,094	1,432	14,811	821	32	19.3	15,505	3,812	10,642	1,251
15	19.1	16,741	1,294	13,243	2,154	33	22.0	16,472	4,666	10,630	1,177
16	7.8	17,082	2,180	12,265	2,697	34	20.8	17,078	167	16,521	390
17	6.4	16,583	16,313	5,463	287	35	67.6	15,979	446	14,694	739
18	2.4	16,434	1,452	13,443	1,539	TOTAL	525	568,887	147,696	381,783	40,412



HEALTH

Nashville and Davidson County, TN 2002

Metropolitan Public Health Department of Nashville and
Davidson County, TN
311 23rd Avenue North
Nashville, TN 37203
<http://healthweb.nashville.org>



Bill Purcell, Mayor

Board of Health

Janie E. Parmley, RN
Henry Foster, MD
Margaret Behm
Samuel O. Okpaku, MD
William Hance
Ruth Stewart, MD

Stephanie B.C. Bailey, MD, MSHSA
Director of Health

Health Nashville and Davidson County, TN 2002

Division of Epidemiology
Bureau of Community Assessment and Health Promotion
Metropolitan Public Health Department of Nashville and
Davidson County, TN
311 23rd Avenue North, Nashville, TN 37203
Telephone: 615-340-2151
Fax: 615-340-2110
Website: <http://healthweb.nashville.org>

Health Nashville and Davidson County, TN 2002

Project Team

Jianshi (Jesse) Huang, MD, MPH, MBA, Team Leader

Nancy Horner, RN

Melissa Garcia, MPH

Brook McKelvey, MPH

Ami Sklar, MPH

Jim Jellison, BA

Layout and design by Nancy Horner

Health, Nashville and Davidson County, TN, 2002

This report is developed in the public domain and may be used and reprinted without special permission. Citation as to source, however, is appreciated. Suggested citation: "Division of Epidemiology, Metropolitan Public Health Department of Nashville and Davidson County, TN. *Health, Nashville and Davidson County, TN , 2002*. Nashville, TN: 2002."

First Edition

ISBN 0-9663802-3-1

Printed in the United States of America

Message from the Director of Health

I enjoyed reading this document. I will issue a caution, however; it is loaded with information useful for assuring that our collective efforts are targeted towards creating a healthy and **PREFERRED FUTURE** for our community. The Metro Public Health Department's mission is to provide health protection, promotion, and information products to everyone in Nashville so they can enjoy healthy living free from disease, injury, and disability. This document is an example of our products, the most comprehensive look at health status determinants for Nashville.

The opportunity to deliberately move towards obtaining the Healthy People 2010 objectives is now. On too many of the national benchmarks, Nashville comes out exceedingly below. On too many of the issues, the disparity gap has been evident for the past decade with no evidence of changing. Hopefully you will join with me in evaluating our total current efforts throughout the city in light of the data and push to do the next thing, be earnest about putting into activity those best practices and lessons learned through research or experience; and courageously give up those things that are not "moving our numbers" towards healthier outcomes.

It is my pleasure to present *Health, Nashville and Davidson County, TN, 2002* to you. It will cause our departmental efforts to be more focused and I expect, yours. In eight years, we want the national report card to reflect that more of the 2010 objectives are met in this community rather than not.



Stephanie B. C. Bailey, MD, MSHSA
Director of Health

Acknowledgements

Overall responsibility for preparing this report rested with the Division of Epidemiology, Bureau of Community Assessment and Health Promotion, under the general direction of Bart N. Perkey, Director of the Bureau.

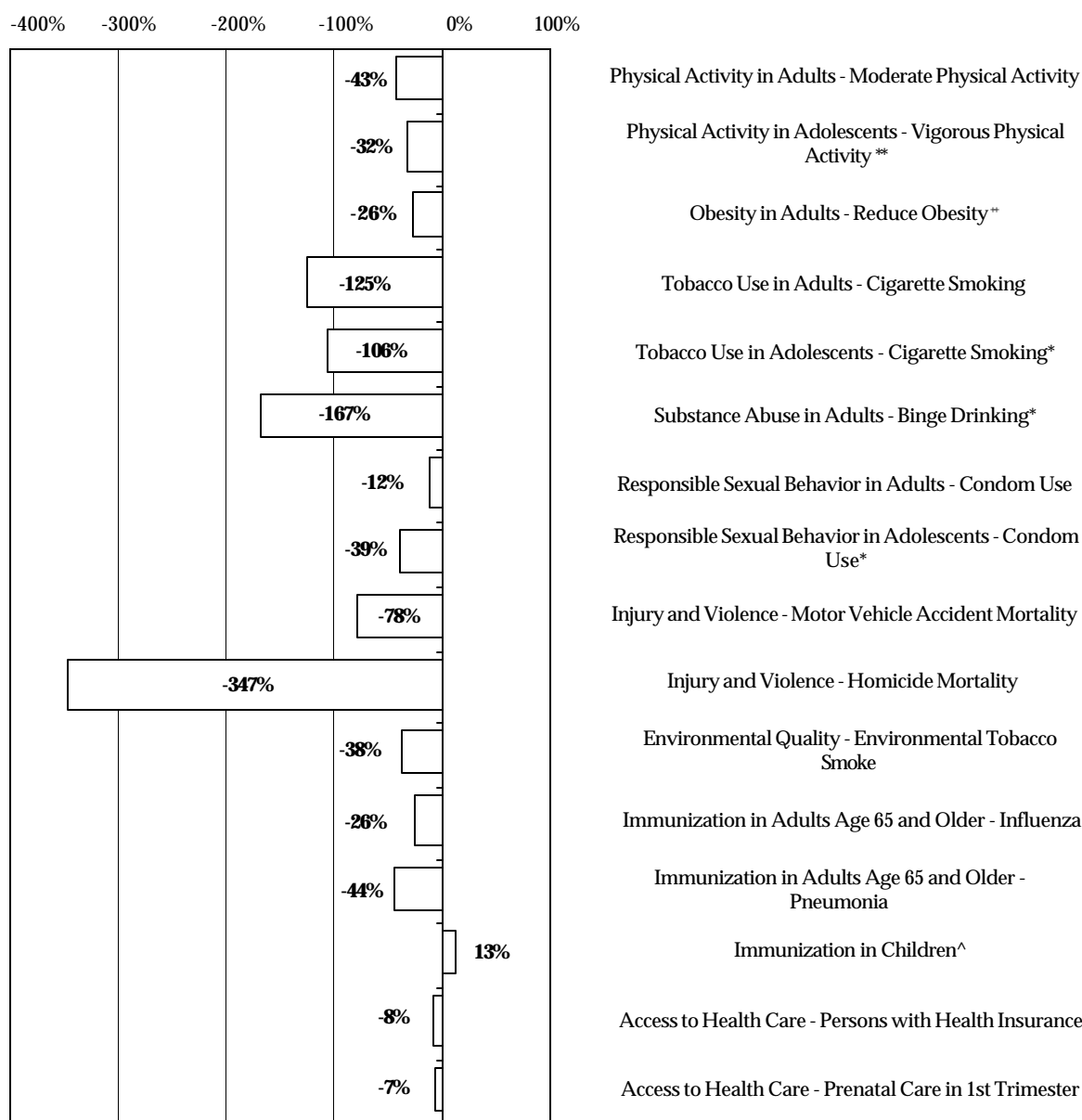
The project team consists of Dr. Jianshi (Jesse) Huang (Team Leader), Nancy Horner, Melissa Garcia, Brook McKelvey, Ami Sklar, and Jim Jellison.

We are greatly indebted to the following persons who gave their time, knowledge, and assistance. Dr. Stephanie Bailey, Bart Perkey, Dr. Brent Hager, Pamela Trotter, Denise Stratz, Jennifer Blackmon, Diane Schmitt, Gail Claybrooks, and Dr. Kimberlee Wyche-Etheridge of Metropolitan Public Health Department of Nashville and Davidson County reviewed parts or the entire manuscript. Frederick Huggins of the Division of Air Pollution Control contributed to section 2.1.2.2 of the report. Rhonda Brooks and Guinna Hall proofread the manuscript. Appreciation is expressed to Information Systems for technical support during the course of this project. Tom Spillman, Dr. Toni Bounds, Richard Lasater, and Bonnie Harrah of Tennessee Department of Health; Dr. Celia Larson of the Division of Research and Evaluation of the Metropolitan Public Health Department of Nashville and Davidson County; Jennifer Higgs of the Metropolitan Planning Commission; Jackie Vandercook of the Tennessee Bureau of Investigation; and Beverly Buchanan of the Metropolitan Nashville Police Department provided data support to this project.

Selected Highlights: Healthy People 2010 Leading Health Indicators for Nashville, Tennessee

Percent Difference Between Nashville Rates and Healthy People 2010 Goals

Negative Percentages = Nashville not reached goal
Positive Percentages = Nashville surpassed goal



*Further information regarding these health indicators is available from Metropolitan Public Health Department but has not been included in this report.

**A proxy measure was used to estimate adolescent vigorous activity in Nashville. See Technical Note 20 for more information.

++The obesity estimate for Nashville may be an underestimate. See Section 2.2.2 for more information.

^A proxy measure was used to estimate child immunization in Nashville. See Technical Note 21 for more information.

Selected Highlights -- Healthy People 2010 Leading Health Indicators

Indicator / Healthy People Objective	Brief Description	National 2010 Target	Nashville's Current Status	Difference between Nashville and 2010 Target
Physical Activity				
Objective 22-2	Adults - moderate physical activity	30%	17%	-43%
Objective 22-7	Adolescents - vigorous physical activity	85%	58%	-32%
Overweight and Obesity				
Objective 19-2	Adults - reduce obesity	15%	18.90%	-26%
Objective 19-3c	Adolescents - reduce overweight and obesity	5%	ND*	
Tobacco Use				
Objective 27-1a	Adults - cigarette smoking	12%	27%	-125%
Objective 27-2b	Adolescents - cigarette smoking	16%	33%	-106%
Substance Abuse				
Objective 26-10a	Adolescents - no alcohol/illicit drugs	89%	ND	
Objective 26-10c	Adults - illicit drug use	3%	ND	
Objective 26-11c	Adults - binge drinking	6%	16%	-167%
Responsible Sexual Behavior				
Objective 13-6	Adults - condom use	50%	44%	-12%
Objective 25-11	Adolescents - condom use	95%	58%	-39%
Mental Health				
Objective 18-9b	Treatment for depression	50%	ND	
Injury and Violence				
Objective 15-15a	Motor vehicle accident mortality	9	16	-78%
Objective 15-32	Homicide mortality	3.2	14.3	-347%
Environmental Quality				
Objective 8-1a	Persons exposed to ozone pollution	0%	ND	
Objective 27-10	Environmental tobacco smoke	45%	62%	-38%
Immunization				
Objective 14-24	Children age 19 to 35 months - fully immunized**	80%	90%	13%
Objective 14-29a	Adults over age 65 - influenza vaccine	90%	67%	-26%
Objective 14-29b	Adults over age 65 - pneumococcal vaccine	90%	50%	-44%
Access to Health Care				
Objective 1-1	Persons with health insurance	100%	92%	-8%
Objective 1-4a	Source of ongoing care	96%	ND	
Objective 16-6a	Prenatal care in first trimester	90%	84%	-7%
*ND=No data available.				

Table of Contents

Message from the Director of Health	<i>page iv</i>
Acknowledgements	<i>page v</i>
Selected Highlights	<i>page vi</i>
Introduction to Health Model	<i>page 1</i>
Determinants of Health	<i>page 5</i>
Health Status	<i>page 97</i>
Consequences of Health Problems	<i>page 236</i>
Appendices	<i>page 239</i>
Index	<i>page 356</i>

Detailed Table of Contents

	<u>page</u>
Message from Director of Health	iv
Acknowledgements	v
Selected Highlights (Healthy People 2010 Leading Health Indicators)	vi
List of Figures	xvi
List of Tables	xxiii
List of Maps	xxv
 1. Introduction to Health Model	 1
2. Determinants of Health	5
2.1 Environment	5
2.1.1 Social Environment	6
2.1.1.1 Population Growth Rate	7
2.1.1.2 Population Distribution by Age and Gender	10
2.1.1.3 Race/Ethnic Composition of Population	13
2.1.1.4 Educational Attainment	16
2.1.1.5 Unemployment	18
2.1.1.6 Poverty Level	21
2.1.1.7 Income	24
2.1.1.8 Single Parent Family	26
2.1.1.9 Population Density	29
2.1.1.10 Lack of Health Insurance	35
2.1.1.11 Non-English Speaking Population	39
2.1.2 Physical Environment	41
2.1.2.1 Drinking Water	42
2.1.2.2 Air Quality	44
2.1.2.3 Sewage	47
2.1.2.4 Solid and Hazardous Waste	48
2.1.2.5 Lead Poisoning	49
2.1.2.6 Food Protection in Restaurants and Retail Food Stores	50
2.1.2.7 Public Facilities	51
2.2 Lifestyle and Behavioral Risk Factors	52
2.2.1 Physical Activity	53
2.2.2 Overweight and Obesity	57
2.2.3 Tobacco Use – Smoking	61
2.2.4 Environmental Tobacco Smoke	64
2.2.5 Sexual Behavior	67
Unmarried Men’s Use of Condoms	71
2.2.6 Substance Abuse and Illicit Drug Use	73
2.2.7 Safety Belt Use	76
2.2.8 Bicycle Helmet Use	81
2.2.9 Cancer Screening	84
Mammography	84
Pap Tests	86
Rectal Exams	87
2.3 Health Care Systems	90
2.3.1 Hospital Beds	91
2.3.2 Health Care Providers	95
3. Health Status	97

Detailed Table of Contents

	<u>page</u>
3.1 Health Status and Quality of Life	98
Health Status	98
Unhealthy Days	100
Activity Limitation Days	101
3.2 Maternal & Infant Health	103
3.2.1 Teen Births	104
Births to Females Aged 15-19	104
Births to Females Aged 10-17	106
Births to Females Aged 10-14	108
Births to Females Aged 10-19	111
Repeat Births to Teens Aged 10-19	112
3.2.2 Fertility	115
Births to Females Aged 15-44	115
Births to Unmarried Females	117
3.2.3 Prenatal Care	121
Females Receiving First Trimester Prenatal Care	121
Females Receiving Late or No Prenatal Care	126
3.2.4 Perinatal and Infant Mortality	132
Fetal Mortality	132
Infant Mortality	134
Neonatal Mortality	136
Postneonatal Mortality	138
Leading Causes of Neonatal Mortality	140
Leading Causes of Postneonatal Mortality	140
3.2.5 Low Birth Weight	142
3.2.6 Preterm Birth	145
3.2.7 Maternal Mortality	148
3.3 Mortality	150
3.3.1 Leading Causes of Death	154
3.3.2 Years of Potential Life Lost	161
3.4 Morbidity Associated with Notifiable Diseases or Conditions	166
Trend of Reported Notifiable Diseases/Conditions	167
Ten Most Frequently Reported Notifiable Diseases/Conditions	168
3.4.1 Selected Notifiable Diseases/Conditions	171
3.4.1.1 Notifiable Diseases Affecting the Gastrointestinal Tract	172
3.4.1.2 Tuberculosis	177
3.4.1.3 Notifiable Conditions Related to Antimicrobial Resistance	184
3.4.1.4 Hepatitis B and C	187
3.4.1.5 Vaccine-preventable Notifiable Diseases/Conditions	194
3.4.1.6 Vector-borne Notifiable Diseases/Conditions	197
3.4.1.7 Notifiable Diseases/Conditions as Possible Bioterrorism Threats	199
3.4.2 Adult Influenza and Pneumococcal Vaccinations	200
3.4.3 Sexually Transmitted Diseases	207
3.4.3.1 Chlamydia	208
3.4.3.2 Gonorrhea	212
3.4.3.3 Syphilis	216
3.4.3.4 HIV/AIDS	220
3.5 Cancer Incidence	225
4. Consequences of Health Problems	236
4.1 Economic Dimension of Health Problems	237

Detailed Table of Contents

	<u>page</u>
5. Appendices	239
5.1 Glossary	240
5.2 Technical Notes	247
5.3 ICD-9 and ICD-10 Codes	259
Table A Comparable Category Codes for Nashville's Leading Causes of Death, according to the Ninth and Tenth Revisions of the International Classification of Diseases	C-1
Table B List of 113 Selected Causes of Death (ICD-10)	C-2
Table C List of 130 Selected Causes of Infant Death (ICD-10)	C-7
5.4 Data Tables	272
Data Table 1 Population Growth Rate, Davidson County/Nashville, TN, 1790-2000	D-1
Data Table 2 Census Population by Public Health Planning District, Nashville, TN, 1990 and 2000	D-1
Data Table 3 Census Population by Council District, Nashville, TN, 1990 and 2000	D-1
Data Table 4 Population Changes by Age Group, Nashville, TN, 1990 and 2000	D-2
Data Table 5 2000 Census Population by Age, Race, Gender, and Ethnicity, Nashville, TN (Data Tables 5-1 to 5-4)	D-3
Data Table 6 Population by Race, Ethnicity, Gender, and Public Health Planning District, Nashville, TN, 2000 (Data Tables 6-1 to 6-3)	D-4
Data Table 7 Population by Age, Gender, and Public Health Planning District, Nashville, TN, 2000 (Data Tables 7-1 to 7-3).	D-5
Data Table 8 Population by Race, Ethnicity, Age, Gender, and Public Health Planning District, Nashville, TN, 2000 (Data Tables 8-1-1 to 8-14-3)	D-6
Data Table 9 Population by Race, Ethnicity, Gender, and Council District, Nashville, TN, (1991 – 2002)	D-14
Data Table 10 2000 Census Population by Age, Gender, and Council District, Nashville, TN, (1991 – 2002) (Data Tables 10-1 to 10-7)	D-15
Data Table 11 2000 Census Population by Race, Ethnicity, Age, Gender, and Council District, Nashville, TN, (2003 forward) (Data Tables 11-1 to 11-35-2)	D-19
Data Table 12 Population by Race, Ethnicity, Gender, and Council District, (2003 forward), Nashville, TN, 2000	D-23
Data Table 13 Percentage of Population's Educational Attainment, Persons 25 years and Over, Nashville, Tennessee, and the United States, 1990 and 2000	D-24
Data Table 14 Percentage of Persons Below Poverty Level, Nashville, TN, 1990 and 2000	D-24
Data Table 15 Percentage of Persons Below Poverty Level, Nashville, Tennessee, and the United States, 2000	D-24
Data Table 16 Per Capita Income and Median Household Income, Current Dollar and 2000 Adjusted Dollar, Nashville, TN, 1990 to 2000	D-24
Data Table 17 Male or Female Householder, with Own Children Under 18 Years, Nashville, TN, 1990 and 2000	D-24
Data Table 18 Percentage of Families with Female Householder, No Husband Present, Nashville, Tennessee, and the United States, 1990 and 2000	D-24

Detailed Table of Contents

	<u>page</u>
Data Table 19	Responses to BRFSS Questions Regarding Lack of Health Insurance, Nashville, TN, 1996 D-25
Data Table 20	Responses to BRFSS Questions Regarding Lack of Health Insurance, Nashville, TN, 1998 D-26
Data Table 21	Population Density, Nashville, Tennessee, and the United States, 2000 D-27
Data Table 22	Population Density by Gender, Race, Ethnicity, and Public Health Planning District, Nashville, TN, 2000 D-27
Data Table 23	Population Density by Gender, Race, Ethnicity, and Council District (1991 – 2002)/(2003 forward), Nashville, TN, 2000 (Data Tables 23-1 to 23-2) D-28
Data Table 24	Language Spoken at Home, Age 5 and Over, Nashville, TN, 1990 and 2000 D-29
Data Table 25	Responses to BRFSS Questions about Physical Activity, Nashville, TN, 1996 D-30
Data Table 26	Responses to BRFSS Questions about Physical Activity, Nashville, TN, 1998 D-31
Data Table 27	Calculated Body Mass Index from Height and Weight Responses to BRFSS, Nashville, TN, 1996 and 1998.. D-32
Data Table 28	Responses to BRFSS Questions about Smoking, Nashville, TN, 1996 and 1998 D-33
Data Table 29	Responses to BRFSS Questions about Environmental Tobacco Smoke Exposure, Nashville, TN, 1998 D-34
Data Table 30	Responses to BRFSS Questions about Sexual Behavior Change, Nashville, TN, 1996 D-35
Data Table 31	Responses to BRFSS Questions about Sexual Behavior Change, Nashville, TN, 1998 D-36
Data Table 32	Responses to BRFSS Questions about Safety Belt Use, Nashville, TN, 1996 D-37
Data Table 33	Responses to BRFSS Questions about Safety Belt Use, Nashville, TN, 1998 D-38
Data Table 34	Responses to BRFSS Questions about Bicycle Helmet Use in Children, Nashville, TN, 1996 D-39
Data Table 35	Responses to BRFSS Questions about Mammography, Nashville, TN, 1996 and 1998 D-40
Data Table 36	Responses to BRFSS Questions about Pap Smear Tests, Nashville, TN, 1996 and 1998 D-41
Data Table 37	Responses to BRFSS Questions about Digital Rectal Exams, Nashville, TN, 1996 and 1998 D-42
Data Table 38	Responses to BRFSS Questions Regarding Health Status and Activity Limitation Days, Nashville, TN, 1996 D-43
Data Table 39	Responses to BRFSS Questions Regarding Health Status and Activity Limitation Days, Nashville, TN, 1998 D-44
Data Table 40	Number of Teen and Adolescent Births by Race and Age, Nashville, TN, 1990-2000 D-45
Data Table 41	Teen and Adolescent Birth Rates by Race and Age, Nashville, TN, 1990-2000 D-45
Data Table 42	Number of Births with Age-specific Birth Rates per 1,000 Females Aged 10-14, by Race, for Selected Counties and Tennessee, 2000 D-46

Detailed Table of Contents

	<u>page</u>
Data Table 43	Number of Births with Age-specific Birth Rates per 1,000 Females Aged 10-17, by Race, for Selected Counties and Tennessee, 2000 D-46
Data Table 44	Number of Births with Age-specific Birth Rates per 1,000 Females Aged 15-19, by Race, for Selected Counties and Tennessee, 2000 D-46
Data Table 45	Number of Births with Age-specific Birth Rates per 1,000 Females Aged 10-19, by Race, for Selected Counties and Tennessee, 2000 D-46
Data Table 46	Number of Live Births and Birthrates by Race For Females Age 15-44, Nashville, TN, 1990-2000 D-47
Data Table 47	Number of Live Births With General Fertility Rates By Race, for Selected Counties and Tennessee, 2000 D-47
Data Table 48	Number and Percent of All Live Births to Unmarried Women, Nashville, TN, 1990-2000 D-47
Data Table 49	Number and Percent of Births to Unmarried Women, by Race of Mother, for Selected Counties and Tennessee, 2000 D-47
Data Table 50	Percentage of Women with Live Births Who Entered Prenatal Care During the First Trimester by Race and Age, Nashville, TN, 1990-2000 D-47
Data Table 51	Percentage of Women with Live Births Who Started Prenatal Care During the First Trimester by Race and Age, for Selected Counties, Tennessee, and the U.S., 2000 D-47
Data Table 52	Percentage of Women with Live Births Who Received No Prenatal Care During the Third Trimester by Race and Age, Nashville, TN, 1990-2000 D-48
Data Table 53	Percentage of Females with Live Births Who Received Late Or No Prenatal Care By Race and Age, for Selected Counties, Tennessee, and the U.S., 2000 D-48
Data Table 54	Infant Mortality Rates by Race, and Fetal Mortality Rates, Nashville, TN, 1990-2000 D-49
Data Table 55	Infant Mortality Rates per 1,000 Live Births, and Numbers, by Race of Mother, for Tennessee and Selected Counties in Tennessee, 2000, and the U.S., 1999 D-50
Data Table 56	Neonatal Mortality Rates per 1,000 Live Births, and Numbers, by Race of Mother, for Tennessee and Selected Counties in Tennessee, 2000, and the U.S., 1999 D-50
Data Table 57	Postneonatal Mortality Rates per 1,000 Live Births, and Numbers, by Race of Mother, for Tennessee and Selected Counties in Tennessee, 2000, and the U.S., 1999 D-50
Data Table 58	Number and Percent of Low Birth Weight Births by Race and Age, Nashville, TN, 1990-2000 D-51
Data Table 59	Number and Percent of Preterm Births by Race and Age, Nashville, TN, 1990-2000 D-51
Data Table 60	Number and Percentage of Low Birth Weight Births by Race of Mother, for Tennessee and Selected Counties in Tennessee, 2000, and the U.S., 1999 D-52
Data Table 61	Number and Percentage of Preterm Births By Race of Mother, for Tennessee and Selected Counties in Tennessee, 2000, and the U.S., 1999 D-52
Data Table 62	Deaths by Age, Race, and Sex, Nashville, TN, 2000 D-53

Detailed Table of Contents

	<u>page</u>
Data Table 63	Crude Death Rates per 100,000 Population by Age, Race, and Sex, Nashville, TN, 2000 D-53
Data Table 64	Total Deaths by Planning District, Gender, Race, and Age, Nashville, TN, 1998 D-54
Data Table 65	Total Deaths by Council District, Gender, Race, and Age, Nashville, TN, 1998 D-55
Data Table 66	Leading Causes of Death (and Number of Deaths) by Planning District, Nashville, TN, 1998 D-56
Data Table 67	Leading Causes of Death (and Number of Deaths) for Females by Planning Districts, Nashville, TN, 1998 D-57
Data Table 68	Leading Causes of Death (and Number of Deaths) for Males by Planning Districts, Nashville, TN, 1998 D-57
Data Table 69	Leading Causes of Death (and Number of Deaths) for Blacks by Planning District, Nashville, TN, 1998 D-58
Data Table 70	Leading Causes of Death (and Number of Deaths) for Whites by Planning Districts, Nashville, TN, 1998 D-58
Data Table 71	Leading Causes of Death (and Number of Deaths) by Council Districts, Nashville, TN, 1998 D-59
Data Table 72	Leading Causes of Death (and Number of Deaths) for Males by Council Districts, Nashville, TN, 1998 D-60
Data Table 73	Leading Causes of Death (and Number of Deaths) for Females by Council Districts, Nashville, TN, 1998 D-61
Data Table 74	Leading Causes of Death (and Number of Deaths) for Whites by Council Districts, Nashville, TN, 1998 D-62
Data Table 75	Leading Causes of Death (and Number of Deaths) for Blacks by Council Districts, Nashville, TN, 1998 D-63
Data Table 76	Years of Potential Life Lost by Planning District, Nashville, TN, 1998 D-64
Data Table 77	Years of Potential Life Lost by Council District, Nashville, TN, 1998 D-67
Data Table 78	Responses to BRFSS Questions about Adult Influenza and Pneumococcal Vaccinations, Nashville, TN, 1998 D-73
Data Table 79	Influenza Vaccination Rates by ZIP Code and Subgroup, Nashville, TN, 2000 D-74
Data Table 80	Pneumococcal Vaccination Rates by ZIP Code and Subgroup, Nashville, TN, 2000 D-75
Data Table 81	Chlamydia Cases Reported to MPHD by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-76
Data Table 82	Chlamydia Cases among 15-24 Year Olds Reported to MPHD by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-76
Data Table 83	Chlamydia Cases Reported to MPHD by Age Group and Gender, Nashville, TN, 1995-2000 D-76
Data Table 84	Chlamydia Rates by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-77
Data Table 85	Chlamydia Rates among 15-24 Year Olds by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-77
Data Table 86	Chlamydia Rates by Age Group and Gender, Nashville, TN, 1995-2000 D-77
Data Table 87	Gonorrhea Cases Reported to MPHD by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-78
Data Table 88	Gonorrhea Cases among 15-24 Year Olds Reported to MPHD by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-78

Detailed Table of Contents

	<u>page</u>
Data Table 89	Gonorrhea Cases Reported to MPHD by Age Group and Gender, Nashville, TN, 1995-2000 D-78
Data Table 90	Gonorrhea Rates by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-79
Data Table 91	Gonorrhea Rates among 15-24 Year Olds by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-79
Data Table 92	Gonorrhea Rates by Age Group and Gender, Nashville, TN, 1995-2000 D-79
Data Table 93	Primary and Secondary Syphilis Cases Reported to MPHD by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-80
Data Table 94	Primary and Secondary Syphilis Cases Reported to MPHD by Age Group and Gender, Nashville, TN, 1995-2000 D-80
Data Table 95	Primary and Secondary Syphilis Rates by Race/Ethnicity and Gender, Nashville, TN, 1995-2000 D-80
Data Table 96	Primary and Secondary Syphilis Rates by Age Group and Gender, Nashville, TN, 1995-2000 D-80
Data Table 97	HIV and AIDS Cases and Rates by Date of Report and Date of Diagnosis, Nashville, TN, 1990-2000 D-81
Data Table 98	HIV and AIDS Cases and Rates by Subgroup, Nashville, TN, 2000 D-81
Data Table 99	Number of New Cancer Cases and Number of Cancer Deaths by Gender and Race, Nashville, TN, 1992-1996 D-82
Data Table 100	Leading Cancer Sites: Number of Cancer Cases and Age-adjusted Cancer Incidence Rate, Nashville, TN, 1992-1996 D-82
Data Table 101	Ten Leading Cancer Sites: Number of Cancer Cases and Age-adjusted Cancer Incidence Rate by Gender, Nashville, TN, 1992-1996 D-82
Data Table 102	Ten Leading Cancer Sites: Number of Cancer Cases and Age-adjusted Cancer Incidence Rate by Race, Nashville, TN, 1992-1996 D-82
Data Table 103	Age-adjusted Cancer Incidence Rate by Gender/Race and Year, Nashville, TN, 1992-1996 D-82
Data Table 104	Age-adjusted Cancer Incidence Rate by Site and Year, Nashville, TN, 1992-1996 D-82
Data Table 105	Cancer Incidence, Age-adjusted Rate, Tennessee, Shelby, Knox, Hamilton Counties, and Nashville, 1992-1996 D-83
Data Table 106	Lung Cancer Incidence, Age-adjusted Rate, Tennessee, Shelby, Knox, Hamilton Counties, and Nashville, 1992-1996 D-83
Data Table 107	Female Breast Cancer Incidence, Age-adjusted Rate Tennessee, Shelby, Knox, Hamilton Counties, and Nashville, 1992-1996 D-83
Data Table 108	Prostate Cancer Incidence, Age-adjusted Rate, Tennessee, Shelby, Knox, Hamilton Counties, and Nashville, 1992-1996 D-83
Data Table 109	Colon Cancer Incidence, Age-adjusted Rate, Tennessee, Shelby, Knox, Hamilton Counties, and Nashville, 1992-1996 D-83
Data Table 110	Bladder Cancer Incidence, Age-adjusted Rate, Tennessee, Shelby, Knox, Hamilton Counties, and Nashville, 1992-1996 D-83
6. Index	356

List of Figures

	<u>page</u>
Figure 1. The MPHD's Operational Model of Health	2
Figure 2. Population and Population Growth Rate, Nashville, TN, 1790-2000	7
Figure 3. Population Change by Race, Nashville, TN, 1990 Versus 2000	8
Figure 4. Population Pyramid, Nashville, TN, 1990	11
Figure 5. Population Pyramid, Nashville, TN, 2000	11
Figure 6. Population Percentage Change by Age Group, Nashville, TN, 1990 and 2000	12
Figure 7. Population Gender Distribution, Nashville, TN, 1990 and 2000	12
Figure 8. Population's Racial Distribution, Nashville, TN, 2000	13
Figure 9. Population's Ethnic Distribution, Nashville, TN, 2000	14
Figure 10. Racial and Ethnic Distribution, Nashville, Tennessee, and U.S., 2000	14
Figure 11. Distribution of Educational Attainment in Persons 25 Years and Over, Nashville, Tennessee, and U.S., 1990 and 2000	17
Figure 12. Unemployment Rates, Nashville, TN, 1990-2000	18
Figure 13. Unemployment Rate, Nashville, Tennessee, and U.S., 2001	19
Figure 14. Percentage of Persons Below the Poverty Level, Nashville, TN, 1990 and 2000	22
Figure 15. Percentage of Persons Below the Poverty Level, Nashville, Tennessee, and U.S., 2000	22
Figure 16. Median Household Income, Nashville, Tennessee, and U.S.	24
Figure 17. Per Capita and Median Household Income, Current Dollar and Inflation Adjusted Dollar (2000\$), Nashville, TN, 1990-2000	25
Figure 18. Percentage of Single Parent Households with Children under 18, Nashville, TN, 1990 and 2000	26
Figure 19. Percentage of Families with Female Householders, No Husband Present, Nashville, Tennessee, U.S., 1990 and 2000	27
Figure 20. Population Density, Nashville, Tennessee, and U.S., 2000	29
Figure 21. Population Density by Health Planning District, Nashville, TN, 2000	30
Figure 22. Population Density by Council District (1991-2002), Nashville, TN, 2000	30
Figure 23. Population Density by Race and Health Planning District, Nashville, TN, 2000	31
Figure 24. Population Density by Health Planning District, Hispanic and Asian Population, Nashville, TN, 2000	31
Figure 25. Population Density by Gender and Health Planning District, Nashville, TN, 2000	32
Figure 26. Population Density by Race and Council District (1991-2002), Nashville, TN, 2000	32
Figure 27. Population Density by Council District (1991-2002), Hispanic and Asian Population, Nashville, TN, 2000	33
Figure 28. Population Density by Gender and Council District (1991-2002), Nashville, TN, 2000	33
Figure 29. Percentage of Respondents Age 18 to 64 without Health Insurance, Nashville, TN, BRFSS, 1996 and 1998.	35
Figure 30. Percentage of Respondents Age 18 to 64 without Health Insurance by Age Nashville, TN, BRFSS, 1996 and 1998.	36
Figure 31. Percentage of Respondents Age 18 to 64 without Health Insurance by Education Nashville, TN, BRFSS, 1996 and 1998.	36
Figure 32. Percentage of Uninsured Respondents Age 18 to 64 by Income, Nashville, TN BRFSS, 1996.	37
Figure 33. Percentage of Respondents Age 18 to 64 Without Insurance by Amount of Time Without Coverage, Nashville, TN, BRFSS, 1996 and 1998	38
Figure 34. Language Spoken at Home, Age 5 and Over, Nashville, TN, 1990	39
Figure 35. Language Spoken at Home, Age 5 and Over, Nashville, TN, 2000	40
Figure 36. Respondents Who Were Physically Active in the Prior Month, BRFSS, Nashville, TN, 1996 and 1998	53
Figure 37. Respondents Who Were Physically Active in the Prior Month by Age Group, BRFSS, Nashville, TN, 1996 and 1998	54

List of Figures

	<u>page</u>
Figure 38. Respondents Who Were Physically Active in the Prior Month by Education Level BRFSS, Nashville, TN, 1996 and 1998	54
Figure 39. Overweight per Body Mass Index, BRFSS, Nashville, TN, 1996 and 1998	58
Figure 40. Overweight per Body Mass Index by Age Group, BRFSS, Nashville, TN, 1996 and 1998	58
Figure 41. Overweight per Body Mass Index by Education Level, BRFSS, Nashville, TN, 1996 and 1998	59
Figure 42. Percent of Respondents Who Were Smokers, Nashville, TN, BRFSS, 1996 and 1998	61
Figure 43. Percent of Respondents Who Were Smokers by Age Groups, Nashville, TN, BRFSS, 1996 and 1998	62
Figure 44. Percent of Respondents Who Were Smokers by Education Level, Nashville, TN, BRFSS, 1996 and 1998	62
Figure 45. Exposure to Environmental Tobacco Smoke Reported in All Respondents and in Nonsmoking Respondents, BRFSS, Nashville, TN, 1998	64
Figure 46. Exposure to Environmental Tobacco Smoke in Nonsmoking Respondents by Age Group , BRFSS, Nashville, TN, 1998	65
Figure 47. Exposure to Environmental Tobacco Smoke in Nonsmoking Respondents by Education Level , BRFSS, Nashville, TN, 1998	66
Figure 48. Percent of Respondents Who Changed Sexual Behavior due to Their Knowledge of HIV, Nashville, TN, BRFSS, 1996 and 1998	68
Figure 49. Percent of Respondents Who Changed Sexual Behavior due to Their Knowledge of HIV by Age Group, Nashville, TN, BRFSS, 1996 and 1998	68
Figure 50. Percent of Respondents Who Changed Sexual Behavior due to Their Knowledge of HIV by Education, Nashville, TN, BRFSS, 1996 and 1998	69
Figure 51. Monogamous Relationships in Respondents Who Reported Sexual Behavior Change, Nashville, TN, BRFSS, 1996 and 1998.....	69
Figure 52. Condom Use in Respondents Who Reported Change in Sexual Behavior, Nashville, TN, BRFSS, 1996 and 1998	70
Figure 53. Condom Use in Respondents Who Reported Change in Sexual Behavior by Age Group, Nashville, TN, BRFSS, 1996 and 1998	70
Figure 54. BRFSS Respondents Who Always Use Safety Belts, Nashville, TN, 1996 and 1998 .	76
Figure 55. BRFSS Respondents Who Always Use Safety Belts, by Age Group, Nashville, TN, 1996 and 1998	77
Figure 56. BRFSS Respondents Who Always Use Safety Belts, by Education Level Nashville, TN, 1996 and 1998	77
Figure 57. BRFSS Respondents Who Always Use Child Safety Seats or Belts, Nashville, TN, 1996 and 1998	78
Figure 58. BRFSS Respondents Who Always Use Child Safety Seats or Belts, by Adult's Education Level, Nashville, TN, 1996 and 1998	79
Figure 59. Percent of Respondents Who Said Children Age 5 to 15 in Their Household Always Wore Helmets when Riding a Bicycle, by Race and Education, Nashville, TN, BRFSS, 1996	82
Figure 60. Percent of Women Who Have Ever Had a Mammogram, Nashville, TN, BRFSS, 1996 and 1998	85
Figure 61. Percent of Women Who Have Ever Had a Mammogram by Age Group, Nashville, TN, BRFSS, 1996 and 1998	85
Figure 62. Percent of Women Who Have Ever Had a Pap Test, Nashville, TN, BRFSS, 1996 and 1998	86
Figure 63. Percent of Women Who Have Ever Had a Pap Test by Age Group, Nashville, TN, BRFSS, 1996 and 1998	87

List of Figures

	<u>page</u>
Figure 64. Percent of Respondents Over Age 40 Who Have Ever Received a Digital Rectal Exam, Nashville, TN, BRFSS, 1996	87
Figure 65. Percent of Male Respondents Over Age 40 Who Have Ever Had a Digital Rectal Exam, Nashville, TN, BRFSS, 1998	88
Figure 66. Licensed and Staffed Hospital Beds per 1,000 Population in Nashville, Shelby County, Hamilton County, and Knox County, TN, 2000	92
Figure 67. Emergency Room Visits per 1,000 Population in Nashville, Shelby County, Hamilton County, and Knox County, TN, 1995-2000	93
Figure 68. Percent of Respondents Who Reported Fair or Poor Health Status, Nashville, TN, BRFSS, 1996 and 1998	99
Figure 69. Percent of Respondents Who Reported Fair or Poor Health Status by Age Group, Nashville, TN, BRFSS, 1996 and 1998	99
Figure 70. Percent of Respondents Who Reported Fair or Poor Health Status by Education Level, Nashville, TN, BRFSS, 1996 and 1998	100
Figure 71. Birth Rates among Adolescent Females Age 15-19 by Race, Nashville, TN, 2000	105
Figure 72. Birth Rates per 1,000 Females Aged 15-19, by Race, Selected Counties in Tennessee, 2000	105
Figure 73. Birth Rates among Adolescent Females Aged 15-19 by Race, Nashville, TN, 1990-2000	106
Figure 74. Birth Rates among Adolescent Females Aged 10-17 by Race, Nashville, TN, 2000	107
Figure 75. Birth Rates per 1,000 Females Aged 10-17 by Race, for Selected Counties in Tennessee, 2000	107
Figure 76. Birth Rates among Adolescent Females Aged 10-17 by Race, Nashville, TN, 1990-2000	108
Figure 77. Birth Rates among Adolescent Females Aged 10-14, All Races and Blacks, Nashville, TN, 2000	109
Figure 78. Birth Rates per 1,000 Females Aged 10-14, All Races and Blacks, Selected Counties and Tennessee, 2000	110
Figure 79. Birth Rates among Adolescent Females Aged 10-14, All Races and Blacks, Nashville, TN, 1990-2000	110
Figure 80. Birth Rates per 1,000 Females Aged 10-19 by Race, Selected Counties and Tennessee, 2000	111
Figure 81. Birth Rates among Adolescent Females Aged 10-19 by Race, Nashville, TN, 1990-2000	112
Figure 82. General Fertility Rates for Females Aged 15-44 by Race, Nashville, TN, 2000	115
Figure 83. General Fertility Rates by Race for Selected Counties, Tennessee, and the U.S., 2000	116
Figure 84. Fertility Rates for Females Aged 15-44 by Race, Nashville, TN, 1990-2000	117
Figure 85. Percentage of All Live Births to Unmarried Females by Race, Nashville, TN, 2000	118
Figure 86. Percent of All Live Births to Unmarried Females by Race, Selected Counties, Tennessee, and the U.S., 2000	118
Figure 87. Percentage of All Live Births to Unwed Females by Race, Nashville, TN, 1990-2000	119
Figure 88. Percentage of Females with Live Births Who Started Prenatal Care during the First Trimester by Race Compared to the Healthy People 2010 Objective, Nashville, TN, 2000	122
Figure 89. Percentage of Females with Live Births Who Started Prenatal Care during the First Trimester by Race, Selected Counties, Tennessee, and the U.S., 2000	122

List of Figures

	<u>page</u>
Figure 90. Percentage of Adolescent Females Aged 10-19 with Live Births Who Started Prenatal Care during the First Trimester by Race Compared to the Healthy People 2010 Objective, Nashville, TN, 2000	123
Figure 91. Percentage of Adolescent Females Aged 10-19 with Live Births Who Started Prenatal Care during the First Trimester by Race, Selected Counties and Tennessee, 2000	124
Figure 92. Percentage of Females with Live Births Who Started Prenatal Care during the First Trimester by Race, Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-2000	124
Figure 93. Percentage of Adolescent Females Aged 10-19 with Live Births Who Started Prenatal Care during the First Trimester by Race, Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-2000	125
Figure 94. Percentage of Females with Live Births Who Did Not Receive Prenatal Care or Began Care during the Third Trimester of Pregnancy by Race, Nashville, TN, 2000	127
Figure 95. Percentage of Adolescent Females Aged 10-19 with Live Births Who Did Not Receive Prenatal Care or Began Care during the Third Trimester by Race, Nashville, TN, 2000	127
Figure 96. Percentage of Females with Live Births Who Received Late or No Prenatal Care by Race, Selected Counties, Tennessee, and the U.S., 2000	128
Figure 97. Percentage of Adolescent Females Aged 10-19 with Live Births Who Received Late or No Prenatal Care by Race, Selected Counties and Tennessee, 2000	129
Figure 98. Percentage of Females with Live Births Who Received No Prenatal Care or Started Care during the Third Trimester by Race, Nashville, TN, 1990-2000	130
Figure 99. Percentage of Adolescent Females Aged 10-19 with Live Births Who Received No Prenatal Care or Entered Care during the Third Trimester by Race, Nashville, TN, 1990-2000	130
Figure 100. Fetal Mortality Rates by Race of Mother, Nashville, TN, 1998	133
Figure 101. Fetal Mortality Rates by Race Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-1998	133
Figure 102. Infant Mortality Rates by Race of Mother, Nashville, TN, 2000	134
Figure 103. Infant Mortality Rates per 1,000 Live Births, by Race of Mother, Tennessee and Selected Counties, 2000, and the U.S., 1999	135
Figure 104. Infant Mortality Rates by Race of Mother Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-2000	135
Figure 105. Neonatal Mortality Rates by Race of Mother, Nashville, TN, 2000	136
Figure 106. Neonatal Mortality Rates per 1,000 Live Births, by Race of Mother, Tennessee and Selected Counties, 2000, and the U.S., 1999	137
Figure 107. Neonatal Mortality Rates by Race of Mother Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-2000	137
Figure 108. Postneonatal Mortality Rates by Race of Mother, Nashville, TN, 2000	138
Figure 109. Postneonatal Mortality Rates per 1,000 Live Births, by Race of Mother, Tennessee and Selected Counties, 2000, and the U.S., 1999	139
Figure 110. Postneonatal Mortality Rates by Race of Mother, Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-2000	139
Figure 111. Percentage of All Live Births Born Low Birth Weight by Race of Mother, Nashville, TN, 2000	142
Figure 112. Percentages of Low Birth Weight Births, by Race of Mother, Tennessee and Selected Counties, 2000, and the U.S., 1999	143
Figure 113. Percentage of All Live Births Born Low Birth Weight by Race of Mother, Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-2000	144
Figure 114. Percent of Preterm Births by Race of Mother, Nashville, TN, 2000	145

List of Figures

	<u>page</u>
Figure 115. Percentage of Preterm Births by Race of Mother, Tennessee and Selected Counties, and the U.S., 2000	146
Figure 116. Percentage of All Live Births Born Prematurely by Race of Mother, Compared to the Healthy People 2010 Objective, Nashville, TN, 1990-2000	147
Figure 117. Gender, Race, and Age Percent Distribution of Deaths, Nashville, TN, 2000	150
Figure 118. Age-adjusted Mortality Rates for All Causes of Death, 1990-2000	152
Figure 119. Age-adjusted Mortality Rates by Gender and Race, Nashville, TN, 1990-2000	153
Figure 120. Age-adjusted Mortality Rates for Race-Gender Groups, Nashville, TN, 1990-2000	153
Figure 121. Ten Leading Causes of Death by Race Groups, Nashville, TN, 2000	157
Figure 122. Number and Incidence Rate of All Notifiable Diseases/Conditions, Nashville, TN, 1998-2000	167
Figure 123. Number and Incidence Rate of Notifiable Diseases, Excluding STDs/HIV/AIDS, Nashville, TN, 1998-2000	168
Figure 124. Number and Incidence Rate of Selected GI Diseases, Nashville, TN, 1998-2000	172
Figure 125. Percentage of Selected GI Diseases by Gender, Nashville, TN, 1998-2000	173
Figure 126. Percentage of Selected GI Diseases by Race, Nashville, TN, 1998-2000	173
Figure 127. Reported Cases of Selected GI Diseases by Age, Nashville, TN, 1998-2000	174
Figure 128. Incidence Rate of Hepatitis A Compared to Healthy People 2010 Objective, Nashville, TN, 1998-2000	175
Figure 129. Number and Incidence Rate of Reported Cases of Tuberculosis, Nashville, TN, 1998-2000	177
Figure 130. Percentage of Tuberculosis Cases by Gender, Nashville, TN, 1998-2000	178
Figure 131. Percentage of Tuberculosis Cases by Race, Nashville, TN, 1998-2000	179
Figure 132. Reported Cases of Tuberculosis by Age, Nashville, TN, 1998-2000	179
Figure 133. Number and Percent of Foreign-born Tuberculosis Cases, Nashville, TN, 1998-2000	180
Figure 134. Number and Percent of Tuberculosis Cases Who Were also Homeless, Nashville, TN, 1998-2000	180
Figure 135. Number and Percent of Tuberculosis Cases Who Were also HIV+, Nashville, TN, 1998-2000	181
Figure 136. Incidence Rate of Tuberculosis Compared to Healthy People 2010 Objective, Nashville, TN, 1998-2000	182
Figure 137. Comparison of DRSP and VRE by Gender, Race, and Age, Nashville, TN, 1998-2000	185
Figure 138. Number and Incidence Rate of Acute Hepatitis B, Nashville, TN, 1998-2000	188
Figure 139. Number and Incidence Rate of Acute Hepatitis C, Nashville, TN, 1998-2000	188
Figure 140. Number of Hepatitis B HBsAg Positive Pregnant Females, 1998-2000, Nashville, TN	189
Figure 141. Acute Hepatitis B and C by Gender, Race, and Age, Nashville, TN, 1998-2000	189
Figure 142. Percentage of Hepatitis B HBsAg Positive Pregnant Females by Race, Nashville, TN, 1998-2000	190
Figure 143. Incidence Rate of Acute Hepatitis C Compared to Healthy People 2010 Objective, Nashville, TN, 1998-2000	191
Figure 144. Number of Cases of Chronic Hepatitis B and C, Nashville, TN, 1998-2000	192
Figure 145. Incidence Rates for Chronic Hepatitis B and C, Nashville, TN, 1998-2000	192
Figure 146. Reported Cases of Pertussis by Age, Nashville, TN, 1998-2000	194
Figure 147. Percent of BRFSS Respondents Who Received Influenza Vaccination, Nashville, TN, 1998	201
Figure 148. Percent of BRFSS Respondents Who Received Pneumococcal Vaccination, Nashville, TN, 1998	201

List of Figures

	<u>page</u>
Figure 149. Percent of Medicare Beneficiaries Aged 65 and Older Who Received Influenza and Pneumococcal Vaccination, Nashville, TN, 2000	202
Figure 150. Chlamydia Rates by Race and Gender, Nashville, TN, 1995-2001	208
Figure 151. Chlamydia Rates among Young Adults Aged 15-24 by Race and Gender, Nashville, TN, 1995-2001	209
Figure 152. Chlamydia Rates by Subgroup, Nashville, Tennessee, and U.S., 2000	210
Figure 153. Gonorrhea Rates by Race and Gender, Nashville, TN, 1995-2001	212
Figure 154. Gonorrhea Rates among Young Adults Aged 15-24 by Race and Gender, Nashville, TN, 1995-2001	214
Figure 155. Gonorrhea Rates by Subgroup in Nashville, Tennessee, and U.S., 2000	215
Figure 156. Primary and Secondary Syphilis Rates by Race and Gender, Nashville, TN, 1995-2001	217
Figure 157. Primary and Secondary Syphilis Rates by Subgroup in Nashville, Tennessee, and the U.S., 2000	217
Figure 158. Rate of HIV and AIDS by Year of Report, Nashville, TN, 1995-2000	221
Figure 159. Rate of HIV and AIDS by Year of Diagnosis, Nashville, TN, 1995-2000	221
Figure 160. Rate of AIDS by Gender and Race/Ethnicity, Nashville and U.S., Reported in 2000	222
Figure 161. Rate of HIV by Gender and Race/Ethnicity, Nashville, TN, Reported in 2000	222
Figure 162. Number of New Cancer Cases and Number of Cancer Deaths by Gender and Race, Nashville, TN, 1992-1996	225
Figure 163. Ten Leading Cancer Sites, Nashville, TN, 1992-1996	226
Figure 164. Ten Leading Cancer Sites for Males, Nashville, TN, 1992-1996	226
Figure 165. Ten Leading Cancer Sites for Females, Nashville, TN, 1992-1996	227
Figure 166. Ten Leading Cancer Sites for Whites, Nashville, TN, 1992-1996	227
Figure 167. Ten Leading Cancer Sites for Non-Whites, Nashville, TN, 1992-1996	228
Figure 168. Percentage of All Cancer Deaths by Cancer Site, Nashville, TN, 1992-1996	228
Figure 169. Percentage of All New Cancer Cases by Cancer Site, Nashville, TN, 1992-1996	229
Figure 170. Age-adjusted Cancer Incidence Rate by Gender, Nashville, TN, 1992-1996	229
Figure 171. Age-adjusted Cancer Incidence Rate by Race, Nashville, TN, 1992-1996	230
Figure 172. Age-adjusted Cancer Incidence Rate by Gender and Race, Nashville, TN, 1992-1996	230
Figure 173. Prostate Cancer Age-adjusted Rate, Nashville, Shelby, Knox, Hamilton, and Tennessee, 1992-1996	231
Figure 174. Female Breast Cancer Age-adjusted Rate, Nashville, Shelby, Knox, Hamilton, and Tennessee, 1992-1996	231
Figure 175. Lung Cancer Age-adjusted Rate, Nashville, Shelby, Knox, Hamilton, and Tennessee, 1992-1996	232
Figure 176. Cancer Incidence Age-adjusted Rate, Nashville, Shelby, Knox, Hamilton, and Tennessee, 1992-1996	232
Figure 177. Colon Cancer Age-adjusted Rate, Nashville, Shelby, Knox, Hamilton, and Tennessee, 1992-1996	233
Figure 178. Bladder Cancer Age-adjusted Rate, Nashville, Shelby, Knox, Hamilton, and Tennessee, 1992-1996	233
Figure 179. Cancer Age-adjusted Death Rate, Nashville, TN and U.S., 1990-2000	234

List of Figures

	<u>page</u>
Figures in Technical Notes	
Figure TN1. Health Planning Districts in Nashville, TN	256
Figure TN2. Census Tracts in Nashville, TN	256
Figure TN3. Overlay of Health Planning District and Census Tract Layers	256
Figure TN4. Intersection of Health Planning District and Census Tract Layers and Calculation of Intersection Area Proportions	257
Figure TN5. Intersection of Health Planning District and Census Tract Layers and Calculation of Intersection Area Proportions	257

List of Tables

	<u>page</u>
Table 1.	Water Quality Parameters, Nashville, TN, 200143
Table 2.	2000 Nashville Annual Emission Inventory44
Table 3.	2001 Air Quality Index Summary for Nashville, TN45
Table 4.	2001 Ozone Forecasting for Middle Tennessee45
Table 5.	Age-adjusted Rates of BRFSS Respondents Who Reported Being Physically Active in the Month Prior to Survey, Nashville 1996 and 1998, TN 1998 and U.S. 199855
Table 6.	Age-adjusted Rates of Adult Overweight, Nashville 1998, Tennessee 1996, and U.S. 199959
Table 7.	Age-adjusted Percentages of Respondents Who Report that They Are Current . Smokers, Nashville 1996 and 1998, Tennessee 2000, and U.S. 200063
Table 8.	Age-adjusted Percent of Respondents Who Reported Sexual Behavior Changes, BRFSS, Nashville 1996 and 1998, Tennessee 1997, and U.S. 199771
Table 9.	Drug-induced Mortality Rates per 100,000 Population, Age-adjusted, Nashville and U.S., 1999 and 200073
Table 10.	Adult Arrests (Age 18 and older) for Substance/Drug Abuse Violations, Nashville, Tennessee, and U.S., 200074
Table 11.	Age-adjusted Rates of Safety Belt Use, Nashville 1996 and 1998 and U.S. 199779
Table 12.	Age-adjusted Rates of Child Safety Restraint Use in Nashville 1996 and 1998 and U.S. 199779
Table 13.	Age-adjusted Percent of Children Aged 5 to 15 Years Reported to always Wear Helmets when Riding Bicycles, Nashville 1996, Tennessee 1999, U.S. 199982
Table 14.	Age-adjusted Adherence Rates for Cancer Screening Tests86
Table 15.	Hospital Bed, Average Daily Census, and Occupancy in Nashville, Shelby County, Hamilton County, Knox County, and Tennessee, 1999 and 200092
Table 16.	Licensed Health Care Providers in Nashville 2001, Tennessee 1999, and U.S., 199996
Table 17.	Mean Number of Unhealthy Days and Activity Limitation Days in Adult Respondents to the Nashville BRFSS, 1996 and 1998101
Table 18.	Age-adjusted Percentages of Respondents with Self-rated Health Status of Fair or Poor, Nashville 1996 and 1998, Tennessee 1999, and U.S. 1999102
Table 19.	Number and Percentage of Teenage Births that Are Repeat Births by Race, Nashville, TN, 1998-2000113
Table 20.	Leading Causes of Neonatal Mortality (Infants Aged 0 to 27 Days), Nashville, TN, 2000140
Table 21.	Leading Causes of Postneonatal Mortality (Infants Aged 28 to 364 Days), Nashville, TN, 2000141
Table 22.	Number of Maternal Deaths and Maternal Mortality Ratios per 100,000 Live Births by Race, Nashville, TN, 1990-2000148
Table 23.	Number of Deaths and Crude Death Rates, Nashville, TN, 2000151
Table 24.	Ten Leading Causes of Death, Number of Deaths, Percent of all Deaths and Age-adjusted Mortality Rates, Nashville, TN, 2000154
Table 25.	Five Leading Causes of Death in Nashville for Selected Years, 1891-2000155
Table 26.	Leading Causes of Death in the U.S., Preliminary 2000 Data156
Table 27.	Leading Causes of Death by Gender, Nashville, TN, 2000156
Table 28.	Leading Causes of Death by Race, Nashville, TN, 2000157
Table 29.	Leading Causes of Death by Race-Gender Groups, Nashville, TN, 2000158
Table 30.	Leading Causes of Death by Age Group, Nashville, TN, 2000159
Table 31.	Leading Causes of Years of Potential Life Lost, Age-adjusted Rate per 100,000 Population, Nashville, TN 2000 and U.S. 1998161

List of Tables

	<u>page</u>
Table 32. Leading Causes of Death Ranked by Years of Potential Life Lost, by Race, Nashville, TN, 2000	162
Table 33. Leading Causes of Death Ranked by Years of Potential Life Lost, by Gender, Nashville, TN, 2000	163
Table 34. Leading Causes of Death Ranked by Years of Potential Life Lost, by Race and Gender, Nashville, TN, 2000	164
Table 35. Number and Incidence of Reported Notifiable Diseases/Conditions, Excluding STDs/HIV/AIDS, Nashville, Tennessee, 1998-2000	169
Table 36. Ten Most Frequently Reported Notifiable Diseases or Conditions 1998-2000, Nashville Tennessee	170
Table 37. Ten Most Frequently Reported Notifiable Diseases or Conditions Excluding STDs/HIV/AIDS, 1998-2000, Nashville, Tennessee	170
Table 38. Comparison of Selected Gastrointestinal Diseases, Nashville, Memphis, Knoxville, Chattanooga, Tennessee, and U.S., 2000	175
Table 39. Comparison of Number and Incidence Rates of New Tuberculosis Cases, Nashville, Memphis, Knoxville, Chattanooga, Tennessee, and U.S., 2000	181
Table 40. Comparison of Number and Incidence Rates of DRSP and VRE, Nashville, Memphis, Knoxville, Chattanooga, and Tennessee, 2000	185
Table 41. Comparison of Number and Incidence Rates of Acute Hepatitis B and C, Nashville, Memphis, Knoxville, Chattanooga, Tennessee, and U.S., 2000	190
Table 42. Comparison of Numbers and Incidence Rates for Selected Vaccine- preventable Diseases, Nashville, Memphis, Knoxville, Chattanooga, Tennessee, and U.S., 2000	195
Table 43. Comparison of Numbers and Incidence Rates of Selected Vector-borne Diseases, Nashville, Memphis, Knoxville, Chattanooga, Tennessee, and U.S., 2000	198
Table 44. Percent of Medicare Beneficiaries Aged 65 and Older Who Received Influenza and Pneumococcal Vaccinations, Nashville, 1999-2000, Tennessee and U.S., 2000	205
Table 45. Percent of BRFSS Respondents Aged 65 and Older Who Received Influenza and Pneumococcal Vaccinations, Nashville, 1998, Tennessee and U.S., 1999	205
Table 46. Chlamydia Rates by Subgroup, Nashville, TN, 2000	209
Table 47. Gonorrhea Rates by Subgroup, Nashville, TN, 2000	213
Table 48. Primary and Secondary Syphilis Rates by Subgroup, Nashville, TN, 2000	218
Table 49. Estimated Cost of Health Conditions in U.S.	237

Tables in Technical Notes

Table TN1. Calculation of Intersect Area Population Values	257
Table TN2. Calculation of Health Planning District Population Values	257

List of Maps

	<u>page</u>
Map 1. Percentage of Black Medicare Beneficiaries Aged 65 and Older by Zip Code, Nashville, TN, 2000	203
Map 2. Percentage of Medicare Beneficiaries Aged 65 and Older Who Received Influenza Vaccine, Nashville, TN, 2000	203
Map 3. Percentage of White Medicare Beneficiaries Aged 65 and Older Who Received Influenza Vaccine by Zip Code, Nashville, TN, 2000	204
Map 4. Percentage of Black Medicare Beneficiaries Aged 65 and Older Who Received Influenza Vaccine by Zip Code, Nashville, TN, 2000	204

What is Health?

Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

World Health Organization (WHO) 1946

Health is ... seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources as well as physical capacities.

World Health Organization (WHO) 1986

